## **STATE OF CALIFORNIA Budget Change Proposal - Cover Sheet**DF-46 (REV 07/17)

Fiscal Year	Business Unit	Department			Priority No.		
2018-19	8570	Food and Agricultur	e		2		
Budget Request Name 8570-004-BCP-2018-GB Program 6570- Agricultural Plant and Anim Health; Pest Prevention; Food Safety Services				Subprogram			
Budget Request Description  Bee Safe Program							
2018-19 and or	Department of Foo	d and Agriculture reque and manage a Bee Safe of bees.					
Requires Legis	 lation		Code Section(s)	to be Added/Ame	ended/Repealed		
☐ Yes	⊠ No						
Does this BCP components?	contain information	<b>—</b> · · · /	Department CIC	)	Date		
If yes, departm	ental Chief Informa	tion Officer must sign.					
	, specify the project 64PRA), and the ap	et number, the most reco	ent project approv	val document (FSI	R, SPR, S1BA,		
Project No.	Pro	ject Approval Documer	nt:	A	pproval Date:		
· ·	•	ment, does other depart artment, signed and dat			Yes		
Prepared By Courtney Albre	cht	Date 1/4/2018	Reviewed By Stephen Brown		Date 1/4/2018		
Department Dir	ector	Date ,	Agency/Secreta	ry -	Date		
Department of Finance Use Only							
Additional Revi	Additional Review: Capital Outlay ITCU FSCU OSAE CALSTARS Dept. of Technology						
PPBA Original Signed by:  John Fitzpatrick  Date submitted to the Legislature							

#### **BCP Fiscal Detail Sheet**

**BCP Title: Bee Safe Program** 

BR Name: 8570-004-BCP-2018-GB

Budget Request Summary	FY18							
	CY	BY	BY+1	BY+2	BY+3	BY+4		
Personal Services								
Positions - Permanent	0.0	2.0	2.0	2.0	2.0	2.0		
Total Positions	0.0	2.0	2.0	2.0	2.0	2.0		
Salaries and Wages								
Earnings - Permanent	0	144	160	160	160	160		
Total Salaries and Wages	\$0	\$144	\$160	\$160	\$160	\$160		
Total Staff Benefits	0	82	88	88	88	88		
Total Personal Services	\$0	\$226	\$248	\$248	\$248	\$248		
Operating Expenses and Equipment								
5301 - General Expense	Ó	10	5	5	5	5		
5302 - Printing	0	3	2	2	2	2		
5304 - Communications	0	2	2	2	2	2		
5306 - Postage	0	1	1	1	1	1		
5320 - Travel: In-State	0	10	10	10	10	10		
5320 - Travel: Out-of-State	0	4	4	4	4	4		
5322 - Training	0	5	4	4	4	4		
5324 - Facilities Operation	0	7	7	7	7	7		
5340 - Consulting and Professional Services - External	0	1,500	1,500	1,500	1,500	1,500		
5342 - Departmental Services	0	57	57	57	57	57		
5346 - Information Technology	0	10	1	1	1	1		
5368 - Non-Capital Asset Purchases - Equipment	0	15	9	9	9	9		
539X - Other	0	3	3	3	3	3		
Total Operating Expenses and Equipment	\$0	\$1,627	\$1,605	\$1,605	\$1,605	\$1,605		
Total Budget Request	\$0	\$1,853	\$1,853	\$1,853	\$1,853	\$1,853		
Fund Summary								
Fund Source - State Operations	_							
0001 - General Fund	0	1,853	1,853	1,853	1,853	1,853		
Total State Operations Expenditures	\$0	<u>\$1,853</u>	\$1,853	\$1,853	\$1,853	\$1,853		
Total All Funds	\$0	\$1,853	\$1,853	\$1,853	\$1,853	\$1,853		

### Program Summary Program Funding

6570 - Agricultural Plant and Animal Health; Pest Prevention; Food Safety Services	0	1,853	1,853	1,853	1,853	1,853
Total All Programs	\$0	\$1,853	\$1,853	\$1,853	\$1,853	\$1,853

#### BR Name: 8570-004-BCP-2018-GB

#### **Personal Services Details**

	Sa	lary Information	n						
Positions	Min	Mid	Max	<u>CY</u>	<u>BY</u>	<u>BY+1</u>	<b>BY+2</b>	<b>BY+3</b>	<u>BY+4</u>
0756 - Environmental Program Mgr I (Supvry) (Eff. 07-01-2018)				0.0	0.5	0.5	0.5	0.5	0.5
0762 - Environmental Scientist (Eff. 10-01- 2018)				0.0	1.0	1.0	1.0	1.0	1.0
5393 - Assoc Govtl Program Analyst (Eff. 07- 01-2018)				0.0	0.5	0.5	0.5	0.5	0.5
Total Positions			-	0.0	2.0	2.0	2.0	2.0	2.0
Salaries and Wages	CY	ВҮ	BY+1	ВҮ	<b>'+2</b>	В	<b>/</b> +3	В	<b>/</b> +4
0756 - Environmental Program Mgr I (Supvry) (Eff. 07-01-2018)	0	66	66		66		66		66
0762 - Environmental Scientist (Eff. 10-01-2018)	0	45	61		61		61		61
5393 - Assoc Govtl Program Analyst (Eff. 07- 01-2018)	0	33	33		33		33		33
Total Salaries and Wages	\$0	\$144	\$160		\$160		\$160	<del></del>	\$160
Staff Benefits									
5150350 - Health Insurance	0	82	88		88		88		88
Total Staff Benefits	\$0	\$82	\$88		\$88		\$88		\$88
Total Personal Services	\$0	\$226	\$248		\$248		\$248		\$248

#### A. Budget Request Summary

The California Department of Food and Agriculture (CDFA) requests \$1,853,000 General Fund (GF) and 2 positions in fiscal year 2018-19 and ongoing to develop and manage a Bee Safe Program to promote and protect a safe, healthy food supply through the protection of bees.

The development of the Bee Safe Program is designed to improve the health and survival of honeybees by increasing foraging opportunities, reducing pesticide exposure and providing funds for local enforcement of existing laws that promote and protect California's beekeeping industry. The program will build upon existing partnerships between land owners, beekeepers, pesticide applicators, California County Agricultural Commissioners, technical and scientific experts, local, state and federal resource agencies, and state and local land managers. The program will also provide technical resources for database development and data entry tools as well as ongoing program administration at the County Agricultural Commissioner's offices to administer and enforce the program at the local level.

#### B. Background/History

Beekeepers provide a critical service to United States agriculture, and significantly to California's agriculture. California crops such as avocados, almonds, apples and cherries benefit from the increased yields as a result of the pollination services beekeepers provide.

The Healthy Pollinators Working Group, implemented through CDFA's Division of Plant Health and Pest Prevention Services, provides an opportunity for beekeepers, academia and State and Local regulatory officials to collaborate on issues impacting pollinators. However, there is no funding to implement any changes. The Bee Safe Program will provide funding to local counties to enforce registration of beehives.

The Healthy Pollinators Working Group is made up of stakeholders interested in pollinator health. The purpose of this working group is to bring interested parties together to create a shared understanding about the key issues, challenges and opportunities surrounding pollinator health in California and to generate ideas and strategies that focus on improving pollinator health. Participants at the working group meetings have an opportunity to learn about innovative solutions from experts in academia and organizations committed to pollinator health, and are asked to share their ideas about how to improve pollinator health through collaboration and partnership.

Every year, thousands of shipments carrying over 650,000 beehives are transported into California in time for the almond bloom. This occurs over a six-week period in early spring. Each acre of almond trees requires approximately two hives to pollinate, and takes about a dozen bee visits to produce a single nut. With over 900,000 acres of almonds grown in California, pollination of this single crop now requires over 60 percent of all managed honeybee colonies in the country. Almonds, with a farm output value of over \$5 billion, are entirely dependent on honeybee pollination. It is essential that a healthy and sustainable honeybee industry exists to support and maintain this industry.

Existing state law recognizes the importance of both managed honeybees and the necessary use of pesticides to produce and protect California's broad array of agricultural commodities. State law requires beekeepers to register the location of their hives with the County Agricultural Commissioner's offices. Growers are mandated by the county offices to notify beekeepers when there is an intended application of pesticides within one mile of the location of registered hives so that beekeepers can move their hives before application begins.

Food and Agricultural Code (FAC) § 29000-29812 provides authority to the County Agricultural Commissioner's office to enforce various beekeeping laws (i.e. registration, identification, and placement of hives) to ensure the vitality of the beekeeping industry and to protect the welfare of the people of the State of California and the agricultural crops dependent upon honeybees for pollination. The California Department Pesticide Regulation (California Code of Regulations Title 3. Food and Agriculture, Division 6.

Pesticide and Pest Control Operations) also administers regulations designed to protect managed honeybees.

However, CDFA currently does not have a Bee Safe Program and there is no funding for reimbursement of county costs associated with enforcement of FAC § 29000-29812. Additionally, finding locations where bees will be safe from pesticides can be challenging for beekeepers, and many locations outside of orchards are devoid of vegetation suitable for bee foraging due to drought or intensive agricultural practices. As a result, beekeeper compliance with the registration requirement is often low.

The Bee Safe Program will provide funds for reimbursement of county costs associated with enforcement of the beehive registration and identification provisions of FAC § 29000-29812.

#### C. State Level Considerations

CDFA's mission is to serve the citizens of California by promoting and protecting a safe, healthy food supply, and enhancing local and global agricultural trade, through efficient management, innovation and sound science, with a commitment to environmental stewardship.

The Healthy Pollinators Working Group is aligned with CDFA's Strategic Plan "to promote and protect the diverse local and global marketability of the California agricultural brand which represents superior quality, value, and safety" by promoting beehive registration and identifying alternate forage for managed honeybee hives.

The Bee Safe Program and resulting regulations will be consistent with the Department's mission to serve the citizens of California by promoting and protecting a safe, healthy food supply, and will meet the Department's goals of building and optimizing local partnerships.

#### D. Justification

Commercial beekeeping contributes \$15-20 billion to the value of United States agriculture each year. The majority of income for commercial beekeepers comes from fees paid by growers for pollination services. Fees paid to beekeepers by almond growers for pollination services are by far the highest per crop pollination fee in the nation. The fees have continued to increase over the past decade. Industry sources estimate that beekeepers can earn \$150-\$200 per hive placed in almond orchards during bloom. The cost of almond pollination has risen in part due to increased demand for pollination services in response to the rapidly expanding almond acreage in California, and in part to the increasing costs of maintaining beehives.

This funding will allow CDFA to begin operating a statewide Bee Safe Program which will provide financial resources to counties to assist in protecting bee colonies from the significant threats they are being faced with today. Additionally, CDFA staff will act as statewide experts to provide education and outreach to counties and stakeholders to promote best management practices. CDFA staff will also assist in identifying and tracking foraging locations on private properties. Specifically, this proposal will help protect bees and beekeepers from four threats:

Theft of Apiary and Apiary Equipment: Current laws provide protection against apiary theft by authorizing fines for unlawful possession of apiaries or apiary equipment. However, enforcement activities resulting in prosecution of violators and levying of fines may be inconsistent due to lack of available resources at the local level. In recent years, the apiary industry has become concerned about the rising number of apiary thefts and the reported income losses for beekeepers. High fees paid to beekeepers for pollination service of almonds have created incentive for thieves. Recently, Madera and Fresno County law enforcement agencies, in conjunction with County Agricultural Commissioners, recovered nearly \$1 million in stolen beehives. The loss of pollination opportunities for the rightful owners of the bees, and the loss of equipment and damage to recovered hives, result in losses and increased operating expenses that are in addition to challenges already facing the apiary industry. This proposal will provide funds to counties to

allow for a more consistent enforcement statewide, which will result in more prosecutions and fines for the theft of apiary and apiary equipment.

Colony weakness or loss due to inadequate foraging opportunities: In recent years, beekeepers reported colony losses of up to 45 percent, which industry experts agree are non-sustainable. In 2013, the United States Department of Agriculture published a report which identified nutrition and improved access by bees to nutritious forage as primary considerations to improve the health and survival of honeybees. In California, on-going drought and intensive agricultural practices contribute to the lack of foraging opportunities. Chapter 380, Statutes of 2015 (Assembly Bill 1259), requires the California Department of Fish and Wildlife (CDFW) to consider authorizing apiculture on department-managed wildlife areas for foraging opportunities. The CDFA will cooperatively build on this initiative with CDFW to create the Bee Safe Program. CDFA will coordinate with counties, private landowners, and stakeholders to identify and track foraging locations on privately owned and managed lands..

Colony weakness or loss due to pest and disease pressure: In 2016, a total of 153 pests requiring quarantine action (treatment, rejection) were intercepted on over 4,000 shipments entering through the CDFA Border Protection Stations. The majority of these pests originated from Florida and Texas and include ants, beetles and various larvae. Pest contamination can affect the health of a hive, and can contribute to additional costs for beekeepers for treatments or as a result of bee losses. The Bee Safe Program will provide funding to reimburse counties for enforcement of existing laws by promoting hive inspection activities, pest and disease specimen collection and submission, abatement and administrative actions. Additionally, the requested CDFA staff will act as experts in pests and diseases that affect bee colonies and leverage CDFA's extensive statewide infrastructure to assist counties in protecting its bee population from these threats.

Colony weakness, distress, or loss due to pesticide exposure: Existing state law and regulations recognize the importance of both managed honeybees and the necessary use of pesticides to produce and protect California's broad array of agricultural commodities. State law requires beekeepers to register the location of their hives with the County Agricultural Commissioner's offices; regulations administered by the California Department of Pesticide Regulations mandate the county offices to notify beekeepers when there is an intended application of pesticides within one mile of the location of registered hives so that beekeepers can move their hives if necessary before application begins. However, finding locations where bees will be safe from pesticides can be challenging for beekeepers, and many locations outside of orchards are devoid of vegetation suitable for bee foraging due to drought or intensive agricultural practices. As a result, beekeeper compliance with the registration requirement is often low. CDFA staff will coordinate with counties, landowners, and stakeholders to identify and track safe locations from pesticides, when hives must be temporarily relocated and provide training and outreach to beekeepers and counties regarding pesticides and the safe movement of colonies.

#### E. Outcomes and Accountability

The Bee Safe Program will provide reimbursement to counties for enforcement of existing laws intended to prevent theft and prosecute violations. Counties will develop an annual list of apiaries in California that have received a CDFA-issued brand, and will identify 1-10 apiaries that qualify to receive a new CDFA-issued brand. Counties will perform one compliance visit per branded apiary per year to ensure branded apiaries and apiary equipment are being handled by the lawful owners. Upon request, counties will participate with local law enforcement officers to investigate incidents involving unlawful ownership of branded equipment.. Counties will submit a monthly activity report and an annual accomplishment report. Counties will participate in developing training modules for apiary theft prevention for beekeepers and county staff, to be included in regional Bee Safe training programs offered annually.

The Bee Safe Program will enable 1-100 registered and qualified beekeepers to access private and public lands where foraging and safety from pesticides can be found. Counties will participate in the development of qualifying criteria for beekeepers, and will conduct outreach activities to identify potentially qualifying beekeepers. Counties will assist in the development of training material for beekeepers, land managers,

and county staff. Counties will submit a monthly report and an annual accomplishment report to CDFA.

Land owners and land managers, including public land managers, will register 1-100 acres as bee foraging/safe harbor sites for honey bees before and after crop bloom.

The Bee Safe Program will provide reimbursement for apiary inspection activities, including colony strength testing and pest and disease specimen collection and abatement if necessary. Counties will participate in the development of and attend training modules designed to enhance their recognition of pest and disease symptoms and sample collection methods. Counties will submit a monthly activity report and an annual accomplishment report. The Bee Safe Program will provide resources to support a healthy and sustainable honey bee industry. Specifically, the Bee Safe program will provide funding to increase nutritional opportunities for bees, decrease exposure of bees to harmful pesticides, decrease pest pressure within hives, and enforce laws intended to alleviate theft of apiaries and apiary equipment.

#### **Projected Outcomes**

Workload Measure	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Beehive registrations (County Workload)	100	300	600	900	1,200	1,600
County contracts	0	10	20	25	30	35
County workshops; Technical Assistance documents and training material	1	1	2	4	6	8

#### F. Analysis of All Feasible Alternatives

**Alternative #1:** Approve the request of \$1,853,000 GF and 2 positions in 2018-19 and ongoing to create a Bee Safe Program to promote and protect a safe, healthy food supply through the protection of bees.

**Advantages:** The Bee Safe Program will help improve bee health in 2018-19 and ongoing as well as provide resources to promote and protect an important California industry. This proposal will help protect the beekeeping industry from theft and colony weakness due to inadequate foraging opportunities, pests and diseases, and pesticide exposure. CDFA staff will act as statewide experts and coordinators to ensure consistent protections and the utilization of best practices between counties.

**Disadvantages:** This alternative increases the obligation to the GF.

**Alternative #2**: Do not approve the request of \$1,853,000 GF and 2 positions in 2018-19 and ongoing to create a Bee Safe Program to promote and protect a safe, healthy food supply through the protection of bees.

Advantages: There would be no obligation to the General Fund.

**Disadvantages:** The beekeeping industry will continue to provide pollination services to California's \$5 billion almond industry and for other crops, but will not receive state-funded assistance to alleviate losses caused by environmental stressors (lack of nutritious foraging opportunities and safety from pesticides), pests or theft. This will result in the continued loss of bee colonies due to theft, inadequate foraging opportunities, pests and diseases, and pesticide exposure. Continued losses to the population could result in losses to crops that require bees for pollination, which would have an impact to California's economy and the availability of safe and health food.

**Alternative #3:** Approve \$1,500,000 GF in 2018-19 and ongoing to provide financial assistance to the counties to promote and protect a safe and healthy food supply through the protection of bees.

**Advantages:** The alternative would allow for a more consistent enforcement against apiary and apiary equipment thieves and would provide counties with more resources to promote and provide safe foraging locations for bees.

**Disadvantages:** There would be no statewide coordination, development of programs or program evaluation. This alternative would cause a lack of a central hub for resource and information sharing and data collection that CDFA staff would provide.

**Alternative #4:** Establish a fee for California resident beehive registration as the hives move between counties to fund \$1,853,000 and 2 positions in 2018-19 and ongoing to develop and manage a Bee Safe Program to promote and protect a safe, healthy food supply through the protection of bees.

**Advantages:** The Bee Safe Program will help improve bee health in 2018-19 and ongoing as well as provide resources to promote and protect an important California industry. This proposal will help protect the beekeeping industry from theft and colony weakness due to inadequate foraging opportunities, pests and diseases, and pesticide exposure. CDFA staff will act as statewide experts and coordinators to ensure consistent protections and the utilization of best practices between counties.

Disadvantages: The CDFA does not currently have statutory authority to charge a fee for beekeeping. Creating a fee for beekeeping is a policy change and should be considered through policy Legislative committees. Honeybees provide significant benefit to several industries within California, to residents, and to the overall California economy and should be protected utilizing General Funds. Additionally, an assessment on beekeepers could place an unfair burden on resident versus non-resident beekeepers. Thousands of apiary shipments enter California each year, and stay weeks to months to pollinate California's crops before migrating to other areas of the United States. During the 2016-17 pollination season, over 650,000 migratory colonies entered California. These migratory colonies would benefit from the Bee Safe Program but the owners of the colonies (non-resident beekeepers) may not be subject to the assessment. Although current law mandates annual registration of all hives, including those shipped into the state, due to limited county resources, it is likely that many of the migratory hives leave the state without registering.

#### G. Implementation Plan

#### **July 2018**

Hire Staff

#### September 2018

Conduct stakeholder outreach activities

#### October 2018

Organize stakeholder conference and communication plan

#### November 2019

- Develop stakeholder queries for input
- Develop county contract documents and reporting tool
- Solicit county work plans

#### December 2019

Execute county contracts

#### June 2020

- Develop program reporting tool and annual report
- Schedule and attend training sessions

#### **Ongoing**

Continue to provide financial resources to counties and provide statewide coordination

#### H. Supplemental Information

CDFA will enter into contracts with counties for \$1,500,000 annually.

#### I. Recommendation

CDFA recommends Alternative #1 to approve \$1,853,000 GF and 2 positions in 2018-19 and ongoing to promote regulations, and develop and manage a Bee Safe Program to promote and protect a safe, healthy food supply through the protection of bees.

# CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE INTEGRATED PEST CONTROL WORKLOAD ANALYSIS FOR ASSOCIATE GOVERMENTAL PROGRAM ANALYST STATEWIDE APIARY PROGRAM

Under the direction of the Environmental Program Manager II, the Associate Governmental Program Analyst performs a wide variety of fiscal, management and staff services functions including budgeting, personnel, contracts, purchasing, and administrative services for the statewide Apiary program.

Task	Number of Tasks	Hours Per Task	Total Hours Required
BUDGET ACTIVITIES			
Develops and prepares spending projections			
2 times per year	2	32	64
Monitors program budget for accuracy  Once a month	12	8	96
PERSONNEL MANAGEMENT			
Oversees and monitors all personnel transactions and recruitment			
1 task per month	12	6	72
CONTRACT MANAGEMENT			
Develops templates and procedures for country contracts	6	40	120
6 contracts per year  Develops and maintains county contracts reporting tool	36	4	144
3 tasks per month  Monitors expenditures of country contracts  3 tasks per month	36	4.5	162
Monitors monthly work progress of counties  3 tasks per month	36	3.5	126

PROCUREMENT ACTIVITIES			
Provides oversight of all procurement, facility and business transactions	12	6	72
1 task per month			
DOCUMENT ANALYSIS			
Develops program annual report	1	40	40
1 task per year			
TOTAL			896

896 hrs/1778 hrs per PY = **0.5 PY** 

## CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE INTEGRATED PEST CONTROL WORKLOAD ANALYSIS FOR ENVIRONMENTAL SCIENTIST STATEWIDE APIARY PROGRAM

Under the direction of the Environmental Program Manager II, the Environmental Scientist performs a broad range of scientific and professional duties involving the research, environmental analysis, outreach, and logistics of the statewide Apiary program.

Task	Number of Tasks	Hours Per Task	Total Hours Required
Maintains knowledge of environmental programs and polices of the State relating to apiary in regards to human health and protecting the State's agricultural industry and natural resources by reading scientific manuals and articles and attending seminars, subcommittee meetings, conferences and training sessions.	28	4	112
28 events per year  Communicates via conference calls and meetings with other county, state, and federal agencies and other interested stakeholders to address apiary management strategies.  4 tasks per month	48	2.5	120
Develops environmental monitoring manuals and procedures.  1 task per month	12	2	24
Prepares and reviews environmental impact reports to determine the effects of proposed activities on environmental health in accordance to the Statewide Programmatic Environmental Impact Report (PEIR).  30 tasks per month	360	2	720
Evaluates information from research activities to prepare outreach materials regarding program activities for meetings, presentations and other events.  2 tasks per month	24	3	72
Develops charts and graphs in reports from data gathering and data management.  15 tasks per month	180	2	360

Performs administrative tasks including: progress reports, emails, budgets and phone calls.	156	2.5	390
3 tasks per week for 52 weeks			
Total			1798

1798 hrs/1778 hrs per PY = **1.0 PY** 

# CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE INTEGRATED PEST CONTROL WORKLOAD ANALYSIS FOR ENVIRONMENTAL PROGRAM MANAGER I STATEWIDE APIARY PROGRAM

Under the general direction of the Environmental Program Manager II, the Environmental Program Manager I is responsible for the operational planning and review of the statewide Apiary program. The incumbent also acts as a specialist and is primarily responsible for planning and evaluating the statewide Apiary program's operations and performance.

Task	Number of Tasks	Hours Per Task	Total Hours Required
PROGRAM ADMINISTRATION ACTIVITIES			
Identifies and establishes program goals and objectives to evaluate the effectiveness of program operations.  Every other Day (11days/month x 12 months)	132	1	132
Plans, allocates and monitors program budget. Evaluates funding needs.  Once a month	12	6	72
Provides expertise in analyzing complex scientific research and data collection to offer proactive strategies in response to environmental threats.  Every other Day	132	1	132
Reviews program components by evaluating pest risk analysis data and conducting research.  Every other Day	132	1	132
Monitors and manages politically sensitive program elements.  Every other Day	132	1	132
PROGRAM POLICY DEVELOPMENT			
Implements department policies and participates in identifying new policies in conjunction with program activities.  Every other Day	132	1	132

Administers and interprets policies to ensure compliance with external cooperators polices and regulations.	132	1	132
Every other Day	-		
PROGRAM STRATEGIC ACTIVITIES			
Assesses program workforce needs.  Once a Month	12	2	24
Formulates options for alternative funding sources.  Once a year	1	10	10
TOTAL			898

898hrs/1778 hrs per PY = **0.5 PY**